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REMARKS

Claims 1-50 are pending, and claims 1-23 and 44-50 are under examination. Claims 1 and 13 have been amended. New claims 51 and 52 have been added. Support for the amendments can be found throughout the specification and the claims as filed. In particular, support for the amendments to claims 1 and 13 can be found, for example, on page 31, lines 5-21, which clearly indicates that an annotated polypeptide index containing at least one empirically determined characteristic for each polypeptide in the database is an alternative to a sequence database. Support for the amendment to step (d) of claim 13 and new claims 51 and 52 can be found, for example, on page 6, line 16, to page 11, line 28, which teaches a variety of methods for quantitating an identified polypeptide. The amendment of step (a) in these claims merely rephrases the claim to provide antecedent basis for a subsequent term. Accordingly, these amendments and new claims do not raise an issue of new matter and entry thereof is respectfully requested. Entry of the proposed amendments is respectfully submitted to be proper because the amendments are believed to place the claims in condition for allowance.

Applicants appreciate Examiner Tran's time and helpful discussion with Applicant Dr. David Goodlett and Applicant's representative in the telephone interview on July 16, 2003. Applicants believe that the comments below address issues discussed in the telephone interview.

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Rejection Under 35 U.S.C. § 112, Second Paragraph

The rejection of claims 13-23 under 35 U.S.C. § 112, second paragraph, as allegedly indefinite is respectfully traversed. Applicants respectfully maintain, for the reasons of record, that these claims are clear and definite. Nevertheless, to further prosecution, claim 13 has been amended to include comparison to a standard corresponding to the polypeptide or fragment thereof for quantitation. Applicants submit that claim 13 and its dependent claims are clear and definite and respectfully request that this rejection be withdrawn.

Rejection Under 35 U.S.C. § 102

The rejection of claims 1, 2, 8-12, 44, 45 and 47-50 under 35 U.S.C. § 102(b) as allegedly anticipated by Yates, J. Mass Spectrom. 33:1-19 (1998), or Link et al., Nat. Biotechnol. 17:676-682 (1999), is respectfully traversed. Applicants respectfully maintain that these claims are novel over Yates or Link et al.

As discussed with Examiner Tran in the telephone interview on July 16, 2003, neither of Yates nor Link et al. teach the use of an annotated polypeptide index, where the annotated polypeptide index comprises at least one empirically determined characteristic for each of the polypeptides in the index. As discussed in the telephone interview and in the previous Response filed February 18, 2003, Yates and Link et al. use sequence databases and predicted characteristics derived from

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the sequence database but not a database containing at least one empirically determined characteristic. Applicants point out that independent claims 1 and 13 recite that the annotated polypeptide index is not a sequence database. The specification teaches that a polypeptide identification index can be a sequence database or, alternatively, an annotated polypeptide index, which has at least one empirically determined characteristic (page 18, line 15 through page 19, line 5, page 31, lines 5-21).

Although an annotated polypeptide index can include characteristics predicted from a sequence database, the annotated polypeptide index has at least one empirically determined characteristic for each of the polypeptides in the index (page 18, line 15 through page 19, line 5, page 31, lines 5-21). Since neither Yates nor Link et al. teach the use of an annotated polypeptide index, neither reference can anticipate the claims. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Rejections Under 35 U.S.C. § 103

The rejection of claims 1, 44 and 46 under 35 U.S.C. § 103 as allegedly obvious over Yates, J. Mass Spectrom. 33:1-19 (1998), or Link et al., Nat. Biotechnol. 17:676-682 (1999), is respectfully traversed. Applicants respectfully maintain that these claims are unobvious over Yates or Link et al.

As discussed above, neither Yates nor Link et al. teach or suggest using an annotated polypeptide index, which has at least one empirically determined characteristic for each

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polypeptide in the index. Absent such a teaching or suggestion, neither Yates nor Link et al. can render the claimed methods obvious. Accordingly, Applicants respectfully request that this rejection be withdrawn.

The rejection of claims 1, 3, 13, 14 and 20-23 under 35 U.S.C. § 103 as allegedly obvious over Yates, *supra*, or Link et al., *supra*, in view of Mann, Nat. Biotechnol. 17:954-955 (1999), or Gygi et al., Nat. Biotechnol. 17:994-999 (1999), is respectfully traversed. Applicants respectfully maintain that these claims are unobvious over Yates or Link et al., alone or in combination with Mann and/or Gygi et al.

As discussed above, neither Yates nor Link et al. teach or suggest using an annotated polypeptide index, which has at least one empirically determined characteristic for each polypeptide in the index. Absent such a teaching or suggestion, neither Yates nor Link et al. can render the claimed methods obvious. Moreover, neither Mann or Gygi et al. can cure the deficiencies of these references. Therefore, neither Yates or Link et al., alone or in combination with Mann or Gygi et al., can render the claimed methods obvious. Accordingly, Applicants respectfully request that this rejection be withdrawn.

The rejection of claims 1, 4-8 and 15-19 under 35 U.S.C. § 103 as allegedly obvious over Yates, *supra*, or Link et al., *supra*, in view of Masselon et al., Anal. Chem. 72:1918-1924 (2000), is respectfully traversed. Applicants respectfully

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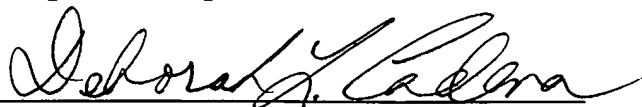
maintain that these claims are unobvious over Yates or Link et al., alone or in combination with Masselon et al.

As discussed above, neither Yates nor Link et al. teach or suggest using an annotated polypeptide index, which has at least one empirically determined characteristic for each polypeptide in the index. Absent such a teaching or suggestion, neither Yates nor Link et al. can render the claimed methods obvious. Moreover, Masselon et al. cannot cure the deficiencies of these references. Therefore, neither Yates or Link et al., alone or in combination with Masselon et al., can render the claimed methods obvious. Accordingly, Applicants respectfully request that this rejection be withdrawn.

CONCLUSION

In light of the amendments and remarks herein, Applicants submit that the claims are now in condition for allowance and respectfully request a notice to this effect. The Examiner is invited to call the undersigned agent or Cathryn Campbell if there are any questions.

Respectfully submitted,



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